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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,283	04/06/2000	Toshiaki Sakaguchi	ASA-873	8159

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EXAMINER

PHAM, THOMAS K

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/544,283

Applicant(s)

SAKAGUCHI ET AL.

Examiner

Thomas K Pham

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Notice to Applicants

1. This action is in response to Request for Continued Examination (RCE) filed on 1/2/2004
2. Claims 1-11 are pending.

DETAILED ACTION

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 5 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Smirnov et al. U.S. Patent No. 6,321,133 (hereinafter Smirnov).

Regarding claim 1

Smirnov teaches

Art Unit: 2121

a method for managing a plurality of actual execution workflows, each thereof for executing a flow of work on the basis of a virtual workflow for monitoring the plurality of actual execution workflows (col. 12 lines 10-12, "Model 130 may be ... it represents."), the actual execution workflows and the virtual workflow each including a plurality of nodes, respectively, comprising the steps of:

- Linking at least one process node of each of the actual execution workflows with a node of the virtual workflow (col. 7 lines 8-17, "Regardless of ... production plans."), a process state of the process node thus linked being permitted to be disclosed to a user of another actual execution workflow (col. 8 lines 11-16, "each task node represents ... to the following state");
- specifying a node of the virtual workflow (col. 7 lines 14-17, "Within the virtual ... the task node.");
- acquiring a node of the actual execution workflow linked with the node thus specified (col. 7 lines 35-42, "During processing of real ... in the model 10."); and
- outputting a progress state of the acquired node as a progress state of the specified node of the virtual workflow (col. 8 lines 45-65, "FIG. 2 presents ... alternative processes").

Regarding claim 2

Smirnov teaches

- setting a user's privilege of operation at each node of the virtual workflow (col. 12 lines 12-16, "as various operators ... model 130 is updated."); and

Art Unit: 2121

- registering the user's privilege of operation thus set in a virtual workflow definition for defining the virtual workflow (col. 9 lines 28-31, "FIG. 4C illustrates ... printing machines.").

Regarding claim 3

Smirnov teaches

- determining an actual execution workflow definition for defining the actual execution workflows by using an attribute of a virtual workflow definition for defining the virtual workflow (col. 10 lines 1-15, "Although model 20 ... in real time."); and
- inputting execution information of the actual execution workflow by using the actual execution workflows definition thus determined (col. 11 lines 52-55, "Note that the ... input/output system.").

Regarding claim 5

Smirnov teaches there are a plurality of virtual workflow definitions for defining the virtual workflow, the method further comprising the steps of:

- inputting information for selecting virtual workflow definition (col. 11 lines 52-55, "Note that the ... input/output system."); and
- determining a virtual workflow definition on the basis of the input information (col. 4 lines 16-21, "generating the workflows ... generated accordingly.").

Regarding claim 11

Smirnov teaches the steps of:

- if a privilege of reference to the acquired node is not permitted to a user requesting the progress state of the specified node, searching the nodes of the actual execution

Art Unit: 2121

workflows for a previous node closest to the acquired node and having a privilege of reference permitted to the user (col. 7 lines 35-42, "During processing ... in the model 10."); and

- outputting a progress state of the previous node as a progress state of the specified node of the virtual workflow (col. 8 lines 45-65, "FIG. 2 presents ... alternative processes.").

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov in view of Cheng U.S. Patent No. 6,067,548.

Regarding claim 4

Smirnov teaches a virtual workflow managing system for managing a plurality of actual execution workflows, each thereof for executing a flow of work, accessing an actual execution workflow definition for defining the actual execution workflow and a virtual workflow definition for defining a virtual workflow for monitoring the actual execution workflows, the actual execution workflows and the virtual workflow including a plurality of nodes, respectively, but does not teach a storage unit for storing the actual execution workflow definition containing an ID of the actual execution workflows and an ID of each of the nodes contained in the actual execution workflow; a storage unit for storing virtual workflow definition containing an ID of

Art Unit: 2121

the virtual workflow, an ID of each of the nodes contained in the virtual workflow and access privilege information given to a user using the virtual workflow definition at each node of the virtual workflow; and a workflow link definition storage unit for storing an ID of a link linking an ID of a node of the virtual workflow with an ID of a corresponding node selected from the actual execution workflows. However, Cheng teaches a storage unit for storing the workflow definition containing an security ID of the workflow and an ID of each of the nodes contained in the workflow (col. 4 lines 21-34, "The present ... linking means."); and a workflow link definition storage unit for storing an ID of a link linking an ID of a node of the virtual workflow with an ID of a corresponding node selected from the actual execution workflows (col. 4 lines 40-48, "The utility ... virtual linking means."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the storage unit of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 6

Smirnov teaches a method for managing a plurality of actual execution workflows, each thereof for executing a flow of work, on the basis of a virtual workflow for monitoring the plurality of actual execution workflows, the actual execution workflows and the virtual workflow each including a plurality of nodes, the method comprising the steps of: searching a node of the actual execution workflows corresponding to a node of the virtual workflow specified by the client, based on the workflow link definition (col. 7 lines 35-43, "During processing ... in the model 10."); and outputting a progress state of the searched node of the actual execution workflows as a

Art Unit: 2121

progress state of the specified node of the virtual workflow to the client (col. 8 line 45-65, "FIG. 2 presents ... alternative processes.") but does not teach a workflow system having a client and a server, holding a virtual workflow definition for defining nodes of the virtual workflow according to purpose of use by the client, an actual execution, workflow definition for defining processing nodes of the actual execution workflows and a workflow link definition for linking the virtual workflow definition of nodes of the virtual workflow with the actual workflow definitions of selected nodes of the actual execution workflows, on the basis of an indication given from the client. However, Cheng teaches a workflow system having a client and a server (col. 11 lines 59-61, "Multiple servers ... within a domain."), holding a virtual workflow definition for defining nodes of the virtual workflow according to purpose of use by the client, an actual execution workflow definition for defining processing nodes of the actual execution workflows and a workflow link definition for linking the virtual workflow definition of nodes of the virtual workflow with the actual workflow definitions of selected nodes of the actual execution workflows, on the basis of an indication given from the client (col. 11 lines 24-42, "The database ... database 152."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 7

Smirnov teaches a server for managing a plurality of actual execution workflows, each thereof for executing a flow of work, on the basis of a virtual workflow for monitoring the actual

Art Unit: 2121

execution workflow, the actual execution workflows and the virtual workflow each including a plurality of nodes, the server comprising: a processing unit for searching a node of the actual execution workflows corresponding to a node of the virtual workflow specified by the client, based on the workflow link definition (col. 7 lines 35-43, "During processing ... in the model 10."); and a processing unit for outputting a progress state of the searched node of the actual execution workflows as a progress state of the specified node of the virtual workflow to the client (col. 8 line 45-65, "FIG. 2 presents ... alternative processes.") but does not teach a system having a client and a server, an information storage unit for storing a virtual workflow definition for defining nodes of the virtual workflow according to a purpose of use by the client, an actual workflow definition for defining processing nodes of the actual execution workflows and a workflow link definition for linking the virtual workflow definition of nodes of the virtual workflow with the, actual workflow definition of selected nodes of the actual execution workflows. However, Cheng teaches a system having a client and a server (col. 11 lines 59-61, "Multiple servers ... within a domain."), an information storage unit for storing a virtual workflow definition for defining nodes of the virtual workflow according to a purpose of use by the client, an actual workflow definition for defining processing nodes of the actual execution workflows and a workflow link definition for linking the virtual workflow definition of nodes of the virtual workflow with the, actual workflow definition of selected nodes of the actual execution workflows (col. 7 lines 54-66, "The present ... class definition."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the server of Cheng with the workflow system of Smirnov because it would provide

Art Unit: 2121

for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 8

Smirnov teaches in a storage medium readable by a computer for storing a program of a method for managing a plurality of actual execution workflows, each thereof for executing a flow of work, on the basis of a virtual workflow for monitoring the plurality of actual execution workflows, the actual execution workflows and the virtual workflow including a plurality of nodes, respectively, the method comprising the steps of: searching a node of the actual execution workflows corresponding to a node of the virtual workflow specified by the client, based on the workflow link definition (col. 7 lines 35-43, "During processing ... in the model 10."); and outputting a progress state of the searched node of the actual execution workflows as a progress state of the specified node of the virtual workflow to the client (col. 8 line 45-65, "FIG. 2 presents ... alternative processes.") but does not teach a workflow system having a client and the server, holding a virtual workflow definition for defining nodes of the virtual workflow according to a purpose of use by the client, an actual execution workflow definition for defining processing nodes of the actual execution workflows and a workflow link definition for linking the virtual workflow definition of nodes of the virtual workflow with the actual workflow definition of selected nodes of the actual execution workflows, based on an indication given from the client. However, Cheng teaches a workflow system having a client and the server (col. 11 lines 59-61, "Multiple servers ... within a domain."), holding a virtual workflow definition for defining nodes of the virtual workflow according to a purpose of use by the client, an actual execution workflow definition for defining processing nodes of the actual execution workflows

Art Unit: 2121

and a workflow link definition for linking the virtual workflow definition of nodes of the virtual workflow with the actual workflow definition of selected nodes of the actual execution workflows, based on an indication given from the client (col. 7 lines 54-66, "The present ... class definition."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the server of Cheng with the workflow system of Smirnov because it would provide for storing the workflow definition and security ID in a secured database in order to collaborate software for authentication, authorization and dynamic job assignment.

Regarding claim 9

Smirnov teaches virtual and actual workflow definition but does not teach the method of holding information about a type of a privilege of operation by the client to the actual workflow definition at each node of the virtual workflow, the type being at least one privilege selected from a display privilege, a reference privilege and an input privilege. However, Cheng teaches the workflow definition holding information about a privilege of operation by the client is defined by the administrator for different roles to control the process (col. 6 lines 17-25, "Most workflow ... task authorization."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the server of Cheng with the workflow system of Smirnov because it would provide for storing the roles of different privileges into the workflow definition as defined by the administrator in order to control different task assignment and task authorization.

Art Unit: 2121

Regarding claim 10

Smirnov teaches each of the nodes contained in the virtual workflow definition is linked with a node selected from a plurality of actual workflow definitions (col. 7 lines 35-43, "During processing ... the model 10.").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (703) 305-7587 and fax number is (703) 746-8874, Monday-Thursday and every other Friday from 7:30AM- 5:00PM EST or contact Supervisor *Mr. Anil Khatri* at (703) 305-0282.

Any response to this office action should be mailed to: **Director of Patents and Trademarks Washington, D.C. 20231**, or **Hand-delivered** responses should be brought to **Crystal Park II, 2121 Crystal Drive Arlington, Virginia, (Receptionist located on the 4th floor)**, or fax to the **official fax number (703) 872- 9306**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thomas Pham
Patent Examiner

TH

January 26, 2004



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